Research & Reviews

Research and Reviews: Journal of Ecology and Environmental Sciences

Service Level Benchmarking for Management of Urban Services.

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Research Article

Received: 29/06/2013
Revised: 03/07/2013
Accepted: 10/07/2013

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Keywords: service level benchmarks, indicators, delivery management, civic services, urban local bodies

ABSTRACT

India's rapid economic growth in the last two decades has been accompanied by increased levels of urbanization. Our cities, which are engines of growth, are under great strain to meet the growing demands and aspirations of their people. The present paper highlights about the Government of India series of initiatives aimed at enabling urban local bodies to meet the unprecedented challenges that they face today. The Handbook of Service Delivery Benchmarking developed by the Ministry of Urban Development through a consultative process shall provide a standardized framework for performance monitoring in respect to water supply, sewerage, solid waste management services and storm water drainage, and would enable State level agencies and local level service providers to initiate a process of performance monitoring and evaluation against agreed targets, finally resulting in the achievement of service level benchmarks.

INTRODUCTION

In India out of the total population of 1210.2 million as on 1st March, 2011, about 377.1 million are in urban areas. The net addition of population in urban areas over the last decade is 91.0 million. The percentage of urban population to the total population of the country stands at 31.6. There has been an increase 3.35 percentage points in the proportion of urban population in the country during 2001-2011.The provisional results of Census 2011 reveals that there is an increase of 2774 towns comprising 242 Statutory and 2532 Census towns over the decade. Growth rate of population in urban areas was 31.8% [1]. Municipal services viz., water, wastewater, solid waste, heating, and transport are the basic building blocks of efficient, healthy, and economically vital communities. Although ensuring adequate provision of these services is a critical public sector function, many national and sub-national governments fall short. Quality municipal services support the economic development of municipalities, while poor levels of service, interruptions, low coverage levels, and other problems can undermine quality of life in municipalities, retard economic growth, and erode trust between citizens and local governments [2].

Need for Service Level Benchmarks

In every sector, there are few key performance indicators that are understood by most stakeholders in that sector. Similarly, in the urban sector too there have been a number of performance indicators related to urban management and service delivery that have been defined, measured and reported. All of the above means that systems for measuring performance and taking further action on them have not been institutionalized in urban agencies. It is therefore important

that the basic minimum standard set of performance parameters are commonly understood and used by all stakeholders. Depending on the specific need additional performance parameters can be defined and used [3].

Measuring service levels of civic agencies implies measuring outcomes, and thereby indirectly also reflects on institutional capacity, financial performance and other parameters. Service level parameters can be measured either from a utility manager's / planner's perspective or from a citizen's or consumer's perspective. Further, to facilitate comparison between cities / service delivery jurisdictions, and changes in performance over time, it is important that the performance levels are benchmarked, and monitored against those benchmarks as depicted in the Figure 1.

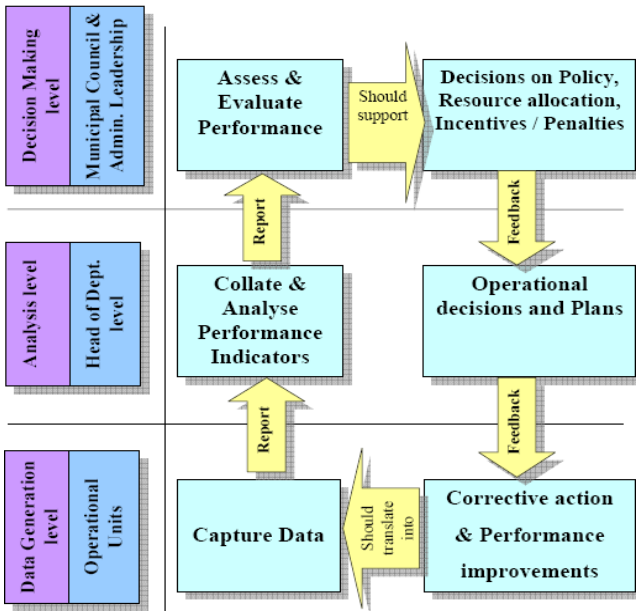

Figure 1: Performance Management System

Benchmarking is now well recognized as an important mechanism for performance management and accountability in service delivery. It involves the measuring and monitoring of service provider performance on a systematic and continuous basis. Sustained benchmarking can help utilities to identify performance gaps and introduce improvements through the sharing of information and best practices, ultimately resulting in better services to people. It is in this context, that the Ministry of Urban Development has initiated an exercise to define Service Level Benchmarks (SLBs). MoUD constituted a 'Core Group for SLBs', comprising experts from various institutions to arrive at the SLBs. Drawing on the experiences of various initiatives in measuring service level performance, the Core Group narrowed down the exercise to four basic urban services to begin with, and arrived at sets of indicators in each. After much deliberation, the indicators, their definitions, means of measurement, frequency and jurisdiction of measurement and reporting, etc. were finalized. The Handbook on Service Level Benchmarks is a ready reckoner of sorts to enable ULBs and other city level parastatal agencies implement systems for measuring, reporting and monitoring the SSLBs. This has also become the cornerstone of the urban reform agenda being implemented as part of various centrally sponsored schemes such as the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) [4-5].

Service Level Benchmarking has been developed and released by the MoUD. It seeks to:

- identify a minimum set of standard performance parameters for the water and sanitation sector that are commonly understood and used by all stakeholders across the country;
- define a common minimum framework for monitoring and reporting on these indicators; and
- Set out guidelines on how to operationalise this framework in a phased manner.

Performance Parameters for Basic Urban Services

Service level performance parameters have been identified for four basic urban services, viz.

- Water Supply
- Sewerage
- Solid Waste Management

- Storm Water Drainage

Performance parameters should be applied in a manner across all cities and be regularly used by all stakeholders. Practical considerations will drive frequency of measurement and reporting; and the jurisdiction of measurement and reporting, both critical aspects in performance measurement. Performance will need to be measured at a frequency higher than or at least equal to the frequency at which it will need to be reported. Frequency should be at such interval at which the variables driving the performance parameter will undergo visible change, and thereby reflect change in performance over different time periods.

Standardization of Parameters

Each indicator has been standardized based on the definition and computation methodology of the selected SLBs (performance indicators). For each selected indicator, the following details have been provided:

- **Title, units and definition:** The specific name, the unit of measurement in which the performance is to be measured, and definition for the indicator
- **Data requirements:** The specific elements of data that need to be captured are identified, along with the corresponding unit of measurement. Each data element is described, and point and frequency of data capture are mentioned and the specific formulae that should be used to arrive at the performance indicator
- **Rationale for the indicator:** For each performance indicator, the overall significance and rationale for assessing and monitoring the performance indicator.
- **Reliability of measurement:** The performance measurement is only as reliable for meaningful management decisions as the systems that generate the data to compute the performance. Typically, four levels of reliability of data systems have been specified: 'A', 'B', 'C', and 'D,' with 'A' being of highest reliability and 'D' being lowest.
- **Frequency of measurement:** Frequency of measurement of the performance indicator refers to the frequency at which the performance level will be assessed and not the frequency at which the data elements will be measured. It can then be reported at the same frequency or a lower frequency.
- **Jurisdiction of measurement:** This refers to the geographic jurisdiction for which performance should be measured, and not the point of data collection. Typically, measuring urban service delivery performance at a sub-city level makes more sense for city level stakeholders, than only city level performance indicators. Similarly, for stakeholders at the State and Central level, it is useful to have city level performance indicators, as they would be useful to compare and contrast cities. Such information will then be useful for the formulation of State level and national strategies and policy responses.

The SLB initiative aims to overcome challenges faced in earlier benchmarking exercises in the following ways:

- Uniform set of indicators, definitions and calculation methodology to enable meaningful comparisons
- Provision of service benchmarks to create consensus on desired service standards
- Data reliability grades to highlight and address issues of data quality
- Self-reporting by Urban Local Bodies (ULBs), as against consultants, to ensure ownership for data
- Emphasis on performance improvement planning based on the SLB data generated.

Standardized Service Level Benchmarks (SSLBS)

List of SSLBs have to chosen, so as to reflect multiple facets of service delivery performance. SSLBs for which detailed data sheets are provided are:

Water Supply

As water supply is a basic need, emphasis has been laid on performance related to reach and access to quality service; and prevalence and effectiveness of the systems to manage the water supply networks. As financial sustainability is critical for continued effectiveness in service delivery, performance is measured on this aspect too. Indicators, benchmark value and data required for water supply service is given in Table 1.

Waste water management (Sewerage and Sanitation)

For waste water management, performance related to reach and access of the service, effectiveness of the network and environmental sustainability have been emphasized, apart from financial sustainability of operations. Indicators, benchmark value and data required for water supply service is given in Table 2.

Table 1: Service Level Benchmarks for Water Supply

Indicator and Benchmark Value	Data Required
Coverage of water supply connections (100 %)	• Total number of households in the service area • Total number of households with direct water supply connection
Per capita supply of water (100%)	• Water supplied to the distribution system • Population served • Number of days in the month • Additional information in respect of areas where water is supplied at a rate less than 70 LPCD
Extent of metering of water connections (135 lpcd)	• Total number of direct service connections • Total number of public standposts • Number of metered direct service connection • Number of metered public stand posts
Extent of Non-Revenue Water (20 %)	• Total water produced and put into the • transmission and distribution syste • Total water sold
Continuity of water supply (24 hours)	• Average hours of pressurized supply per day
Efficiency in redressal of customer complaints (80%)	• Total number of water supply related complaints received per month • Total number of complaints redressed within the month
Quality of water supplied (100 %)	• Total number of water samples in a month • Number of samples that meet the specified potable water standards in that month
Cost recovery in water supply services (100 %)	• Total annual operating expenses • Total annual operating revenues
Efficiency in collection of water supply related charges (90%)	• Current revenues collected in the given Year • Total operating revenues billed during the given year

Table 2: Service Level Benchmarks for Wastewater

Indicator and Benchmark Value	Data Required
Coverage of toilets (100 %)	• Total number of properties having access to individual toilets or community toilet within walking distance in the service area • Total number of properties without individual toilet or community toilet within walking distance
Coverage of waste water network services (100 %)	• Total number of properties in the service area • Total number of properties with direct connection to the sewerage network
Collection efficiency of waste water network (100 %)	• Total water produced • Estimated water use from other sources • Wastewater collected
Adequacy of waste water treatment capacity (100 %)	• Total water consumed • Estimated water use from other sources • Treatment plant capacity • Capacity utilization
Quality of waste water treatment (100 %)	• Total number of wastewater samples in a month • Number of samples that pass the specified secondary treatment standards
Extent of reuse and recycling of waste water (20%)	• Wastewater received at the treatment plants • Wastewater recycled or reused
Extent of cost recovery in waste water management (100%)	• Total annual operating expenses • Total annual operating revenues
Efficiency in redressal of customer complaints (80%)	• Total number of sewerage related complaints received per month • Total number of complaints redressed within the month
Efficiency in collection of sewerage related charges (90%)	• Current revenues collected in the given year • Total operating revenues billed during the given year

Performance related to reach and access, effectiveness of network operations and environmental sustainability has been considered, apart from financial sustainability of operations. Indicators, benchmark value and data required for water supply service is given in Table 3.

Table 3: Service Level Benchmarks for Solid Waste Management

Indicator	Data Required
Efficiency in collection of Sewage charges (100%)	• Current revenues collected in the given year • Total operating revenues billed during the given year
Household level coverage of SWM services through door-to-door collection of waste (100%)	• Total number of households and establishments in the service area • Total number of households and establishments with daily doorstep collection
Collection efficiency (100%)	• Total waste that is generated and which needs to be collected • Total quantum of waste that is collected by the ULB or authorized service providers
Extent of segregation of waste (80%)	• Quantum of waste that is segregated • Total quantum of waste that is collected by the ULB or authorized service providers
Extent of recovery of waste collected (100%)	• Amount of waste that is processed or recycled • Total quantum of waste that is collected by the ULB or authorized service providers
Extent of scientific disposal of waste at landfill sites (100%)	• Total waste disposed in 'compliant' landfills every month • Total waste disposed in all landfills every month
Efficiency in redressal of customer complaints (80%)	• Total number of SWM-related complaints received per month • Total number of complaints redressed within the month
Extent of cost recovery for the ULB in SWM services (80%)	• Total annual operating expenses • Total annual operating revenues
Efficiency in collection of SWM charges (90%)	• Current revenues collected in the given year • Total operating revenues billed during the given year

Strom Water Drainage

Extent of the network and effectiveness of the network are emphasized to assess storm water drainage systems performance. As this service does not yield any direct revenues, financial sustainability is not considered. Indicators, benchmark value and data required for water supply service is given in Table 4.

Table 4: Service Level Benchmarks for Strom Water Drainage

Indicator	Data Required
Coverage of storm water drainage network (100%)	• Total length of road network in the ULB • Total length of primary, secondary and tertiary drains
Aggregate number of incidents of water logging reported in a year (Zero)	• Identification of flood prone points within the ULB limits. • Number of occasions of flooding/water logging in a year

Operationalising the SLB Framework

To encourage and facilitate the adoption of the SLB framework outlined in the Handbook, the MoUD launched an SLB Pilot Initiative in February 2009. The Initiative involved the provision of technical support for the implementation of the framework in 28 pilot cities across 14 States and one union territory—Andhra Pradesh, Kerala, Tamil Nadu, Karnataka, Maharashtra, Gujarat, Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand, Manipur, Punjab, Himachal Pradesh and New Delhi. The cumulative population of the pilot cities represents about 20 per cent of India's urban population. The overarching aim of the SLB Pilot Initiative has been to take the SLB framework forward from concept to practice. Moreover, it aims to establish the link between benchmarking and internal performance improvement efforts. By doing so, it is expected that ULBs/utilities would be encouraged to integrate the benchmarking
process and its outputs into their decision processes.

The initiative encompassed the following aspects:

- Collation of performance data using the indicators and methodologies outlined in the SLB Handbook
- Implementation of improved information systems at the city and State level to support provision of this data on an ongoing basis
- Development of performance improvement plans based on the benchmarking data

The principle of accountability for service levels is now gaining broad-based acceptance at all levels. The ULBs are at the forefront of this shift, based on the decentralization agenda articulated under the 74th Constitutional Amendment. The simple five-point SLB agenda for ULBs is: The MoUD is incorporating this principle in all its programmes and initiatives such as JNNURM, UIDSSMT, Satellite Townships programme, National Water Awards and National Urban Awards. It is also committed to providing the necessary support to States/cities that are making efforts to institutionalize SLB in their context

The principle of benchmarking has been further endorsed by the 13th Finance Commission, which has included SLB as one of the nine conditions for the allocation of performance-based grants to ULBs, which amount to approximately Rs. 8,000 crore over the period 2010-15. It is hoped that ULBs would embrace the principle of service accountability and take the lead in using the SLB framework to deliver improved services for their citizens.

Benefits of Benchmarking

Benchmarking provides the platform to

- Rationalize decision making
- Strengthen the accountability
- Provide greater transparency
- Proper resource mobilization and allocation
- Prioritize development activities

CONCLUSION

Concept of benchmarking is relatively new; it enables the performance measurement and also helps in understanding the lacunae in existing system. The relevance of benchmarking in urban local bodies lies in the fact that these organizations provide a wide array of public services to large populations and use large amount of resources. Benchmarking provides ULBs with a tool for monitoring the input and outputs associated with each services, evaluating their performance level and taking corrective actions to improve their performance and hence the service. It also helps ULBs in identifying resources and how to improve the same.

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